TEACHING STATEMENT
MAAZ AMJAD

The opportunity to act as a teacher and guide for students is one of the aspects that makes a career in academics one of the most interesting and rewarding options. My experience as an instructor, Co-instructor, TA and mentor has provided me with a wealth of knowledge on the qualities of an effective educator. I am eager to use the skills I learned as a graduate and Postdoctoral fellow and continue these efforts as a professor.

Curriculum Teaching Qualification

I am qualified to teach both Introductory and advanced courses. The introductory course will cultivate literate and provide first tastes in subjects. I can teach courses to undergraduates, such as Neural Networks and Deep Learning, Machine Learning and Data Mining, and Artificial Intelligence. In contrast, I can also teach advanced courses that will prepare students who want to enter graduate schools to gain more hands-on experience with handling, processing, and manipulating data to obtain meaningful information. I will help in teaching and helping to create new courses in areas like statistical natural language processing (NLP), data science, text mining, and data analytics. In the statistical NLP course, my students will not only learn about probabilistic language models, but they will also learn about how they work and how pre-trained language models can be used in real life. Depending on the availability of relevant machine learning courses, this course may focus on models and applications for specific NLP. It may also cover the basic probabilistic models using examples from a smaller set of NLP jobs and applications.

Teaching Experience

As an instructor, co-instructor and teaching assistant at three universities, my knowledge in this field is vast. I worked as an instructor, co-instructor and TA across two levels: master's and doctoral. I instructed and co-instructed a master-level class: “Communication Skills for Engineering Leaders” and “Text Processing” respectively. I have also worked as TA in four master classes: “Computational Linguistic I”, “Computational Linguistic II”, “Tratamiento de lenguaje natural” and “Computational Linguistic III” and two doctoral-level classes, “Natural Language Processing” and “Applied Linguistics II) (Linguistic Aplicada II)” and “Computational Linguistic III”. I facilitated problem-solving sessions in every class to augment lectures and answer students' problems. I have taught classes on "Text vectorization," "Machine learning modeling," and "Linguistic Models in NLP" in the Computational Linguistics courses. These courses' problem sets and examinations were enjoyable to create and full of useful information for my students. Naturally, not all students can quickly understand challenging concepts. I always paid more attention to students who were having difficulties with the material and guided them through question answering. For example, during text processing class, a lot of material required mathematics and probability, and some students did not have a background in mathematics. I gave them extra time to cover missing foundational concepts; consequently, those students got A+ in the course's final assessment. The results of those students provided the effectiveness of my teaching.

Mentoring Experience

It was a fantastic experience to be able to help them concentrate their efforts and develop their ideas. These interactions were also fascinating since the people I was counseling could often teach me a great deal about the problem by forcing me to reevaluate my assumptions or address the issue from a different perspective. This allows me to evaluate my teaching skills and pinpoint any areas that need long-term improvement. The chance to teach, supervise and work with undergraduate and graduate students are the key pulls of academia, which is why I applied for this position at AUS.

I also had mentoring experience with the collaboration of a hands-on program at DPS Germany. This experience involved working with students and companies like Airbus to tackle challenging industry tasks. This experience taught me that instead of rushing for solution development, ideation and user journey are vital for successful product development. This lesson helped in the publication of research papers in high-index journals.

I would use a project-based method in teaching, and the learning outcomes will help students build logical thinking, algorithm development, ideation, text mining, and programming skills after course completion.